US-PAT-NO: 5815082

DOCUMENT-IDENTIFIER: US 5815082 A

TITLE: Local communication bus system and apparatuses for use in such a system

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Detailed Description Text - DETX (6):
The VCR device 12 includes its AVC subdevice 22, and also a user input/output subdevice 29 (UIO), or terrestrial broadcast tuner subdevice 28 (TUN), a switchbox subdevice 30 (SB) and a videotape record/replay deck 32 (DCK). The recording medium itself is indicated at 34. The signal path A is connected via a first external (SCART) connector 36 of VCR device 12 to an input of the VCR's switchbox subdevice 30. A second external connector 38 of the VCR device is also connected via a signal path B to the switchbox subdevice 30, for example to allow connection of a videodisc player, or a second VCR. The terrestrial tuner subdevice 28 supplies a video signal to the switchbox 30 via a signal path C, and the deck subdevice 32 supplies a video signal to the switchbox 30 via a signal path D. The switchbox 30 supplies video signals via a signal path E to the deck 32 and via a signal path F to a third external connector 40 of the VCR device 12. The processes of reading and writing signals on the tape 34, within the deck subdevice 32, are schematically represented by video signal paths G and H respectively.

DOCUMENT-IDENTIFIER: US 20020149707 A1

TITLE: Interface module for TV sets

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Summary of Invention Paragraph - BSTX (5):

[0005] The advantage of such an arrangement is that due to the high integration of the module and the shielding casing all connections of the different components are very short and completely shielded, which improves the resistance against interference and the EMC performance in general. Therefore, electromagnetic influence from outside on the tuner and all other included components and functional groups is reduced to a minimum. The short electrical connections between the chip and the tuner also improve the resistance against electromagnetic influence from other TV set components e.g. the CRT. This means that nearly no additional effort to fulfill EMC requirements is necessary for the TV set in which this kind of interface module is used. Furthermore, such an arrangement requires less space on the chassis PCB (Printed Circuit Board) of a TV set than several separate functional groups with additional shielding and other necessary EMC activities. Another advantage is that some functions, which are cheaper to realize by means of a microprocessor or which have to be changed to fit different TV sets, can be transferred to the microprocessor in the chip because the microprocessor makes these functions available anyway. This means that the interface module comprises fewer elements which reduces the manufacturing costs.

Summary of Invention Paragraph - BSTX (7):

[0007] If the Printed Circuit Board (PCB) has, according to claim 3, some parts outside the casing which are not covered by the casing, then it is possible to provide connecting interfaces on the PCB or other peripheral components like a module for controlling LCD panels on the same PCB as the interface module with the chip and the tuner. If such a control circuit for LCD panels is provided, it is a simple task to build a LCD TV set. Then only the interface module and an LCD panel are needed and nothing else. That is an attractive solution for TV set makers.

Detail Description Paragraph - DETX (1):

[0019] Tuner 1 and chip 2 are located in a common casing 3 as shown in FIG. 1 and mounted on a PCB (Printed Circuit Board). The casing 3 is preferably made of metal and can have a small hole on top where electrical contacts for programming are available. The chip is a One Chip solution which means that the chip 2 comprises several parts such as a microprocessor 4, teletext functions, filters and switches 11, signal processing units 13 and decoders 12 for video, color and sound signals. Since tuner 1 and chip 2 are arranged in a common casing 3, the required EMC performance, e.g. the resistance against electromagnetic interference from outside the casing 3, is easy to reach and in many respects improved significantly. The various parts within the chip 2 are controlled by the microprocessor 4. Also the tuner 1 which receives one or more antenna signals 5a, 5b is controlled by the microprocessor 4. Therefore, it is possible that functions of the tuner 1 are shifted to the microprocessor 4. The tuner 1 is able to receive both analog TV signals 5a and radio signals 5b, especially FM signals. An advanced version of the

tuner 1 is further able
to receive digital TV and radio signals. Furthermore, the casing 3 offers
connecting interfaces for a deflection control 8a of a CRT, outputs for RGB
signals 10 and at least one output 9 for sound signals which are to be
amplified. Also the control of such an amplifier is integrated in the chip 2.

Detail Description Paragraph - DETX (2):
[0020] For processing signals of video recorders or DVD players the
interface module has standardized connecting interfaces like SCART 7a, Cinch
inputs 7b for picture and sound. Instead of the SCART connector it is also
possible to have some Cinch in- and outputs, e.g. for the US area. User
interfaces like keyboards 14a and remote control 14 b are also provided.

Claims Text - CLTX (2):
2. An interface module as claimed in claim 1, characterized in that the
chip (2) and the tuner (1) are mounted on a common printed circuit board.

Claims Text - CLTX (3):
3. An interface module as claimed in claim 2, characterized in that the
common printed circuit board comprises further peripheral components and
connecting interfaces partly outside the casing (3).